

Abstract

The present invention relates to an approach to locking the output wavelength of a laser that uses an etalon having non-parallel surfaces. Under
5 this approach, the non-parallel etalon is formed from a readily available, low cost optical component, and may include an etalon with a wedged shape or with at least one curved surface. This approach offers significant advantages over the use of a planar etalon. It provides two degrees of freedom in alignment of the device, and so both the absolute wavelength and the spacing
10 between the interference fringes can be independently adjusted. It also reduces the cost and difficulty of assembly, since it utilizes standard optical parts with wide tolerances. The invention may be used within a standard laser package. The invention also permits the laser to be tuned to a precise operating wavelength by setting various tuning signals according to values
15 stored in memory.